



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/603,038	06/24/2003	Miguel Abdo	061607-1720	2375
24504 7590 06/14/2007 THOMAS, KAYDEN, HORSTEMEYER & RISLEY, LLP 100 GALLERIA PARKWAY, NW STE 1750 ATLANTA, GA 30339-5948			EXAMINER NGUYEN, QUYNH H	
			ART UNIT 2614	PAPER NUMBER
			MAIL DATE 06/14/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/603,038

Applicant(s)

ABDO ET AL.

Examiner

Quynh H. Nguyen

Art Unit

2614

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 8-16, 29-and 33 is/are rejected.
- 7) ☒ Claim(s) 6, 7, 17-28, 34 and 35 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |  |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____  |

## **DETAILED ACTION**

### ***Information Disclosure Statement***

1. The information disclosure statement (IDS) submitted on 5/6/04 and 4/5/06 was received. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-5, 8-9, 14-16, and 29-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Graf et al. (US Patent 6,671,367).

As to claims 1 and 29, Graf et al. teaches the method of determining a capability of at least one communication facility between a first network and a second network (col. 2, lines 30-37) comprising the steps of: detecting whether at least one first network (*originating signaling point*) comprising information with the particular characteristic, the information being capable of causing at least one forwarding entity not to pass the first network (col. 2, lines 44-53; col. 5, lines 10-14); and determining the capability of the at least one communication facility to pass the network with the particular characteristic (col. 5, lines 10-14; col. 6, lines 63-65). Graf et al. further teaches the Bearer Control

Art Unit: 2614

level comprises a bearer network such as IP network (col. 8, lines 16-23); and the use of Internet Protocol networks to transport signaling information (col. 1, lines 28-43).

However, Graf et al. does not specifically teach passing network layer protocol packets.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to expand the use of Internet Protocol networks to transport signaling information in Graf to also transporting or passing network layer protocol packets within communication facility.

Claims 2-4 and 30-32 are rejected for the same reasons as discussed above with respect to the first limitation of claims 1 and 29.

As to claims 5 and 33, Graf et al. teaches network layer addresses of network layer protocol packets that would be forwarded by at least one filtering/forwarding entity (col. 2, lines 44-53; col. 5, lines 10-14). Graf et al. does not teach a destination network layer address that is outside of a network address realm. It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the above mentioned features into the teachings of Graf in order to have a more efficient system that would be able to handle network layer address outside of a network address realm.

As to claim 8, Graf et al. teaches receiving at least one network layer protocol packet (col. 4, lines 50-53).

As to claim 9, Graf et al. teaches determining the network layer protocol process is not expected to be received (col. 5, lines 10-14; col. 6, lines 63-65).

As to claims 14 and 15, Graf et al. teaches the network protocol layer process is an internet protocol layer process (col. 15, lines 1-2).

As to claim 16, Graf et al. teaches the first and second network layer process are peer protocol layer entities (col. 10, lines 32-41).

4. Claims 10-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Graf et al. (US Patent 6,671,367) in view of Moss et al. (US Patent 6,785,372).

As to claim 10, Graf et al. does not teach starting a timeout counter associated with transmitting at least one network layer protocol packet; detecting expiration of the timeout counter without having received at least one network layer protocol packet.

Moss et al. teaches starting a timeout counter associated with transmitting at least one second network layer protocol packet; detecting expiration of the timeout counter (col. 6, lines 65-67; col. 7, lines 1-6 and lines 22-25). Moss et al. does not explicitly teach detecting expiration of the timeout counter without having received at least one network layer protocol packet.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Moss into the teachings of Graf for the purpose of having a more efficient system by having a timeout counter to detect expiration services; and further modify Moss to detecting expiration of the timeout counter without having received at least one network layer protocol packet.

As to claim 11, Graf et al. does not teach receiving a control message indicating the network layer protocol packet was not passed through the communication facilities.

Moss et al. teach receiving a notification when service period expiration (col. 6, lines 47-51).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Moss into the teachings of Graf for the purpose of having a more efficient system by notifying users status of communications services and further modify Moss to notification message to indicate the network layer protocol packet was not passed through the communication facilities in order to assist administrator in managing the system and comes up with course of actions to correct the problem.

As to claim 12, Graf et al. teaches the message is an internet control protocol message (col. 15, lines 1-2).

As to claim 13, Moss et al. teach the message is a time exceeded message (col. 6, lines 47-51).

#### ***Allowable Subject Matter***

5. Claims 6-7, 17-28, and 34-35 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

As to claims 6 and 34, the prior art of record fails to teach, or render obvious, alone, or in combination a method/system of determining a capability of at least one communication facility to pass network layer protocol packets with a particular characteristic between a first network layer protocol process and a second network

Art Unit: 2614

layer protocol process comprising the steps of: detecting whether at least one first network layer protocol packet has been received, the at least one first network layer protocol packet comprising first information with the particular characteristic, the first information being capable of causing at least one filtering/forwarding entity not to pass the at least one first network layer protocol packet; and determining the capability of the at least one communication facility to pass the network layer protocol packets with the particular characteristic, wherein the at least one filtering/forwarding entity is at least one network layer router that operates as a peer protocol layer entity to the at least one first network layer protocol process and the at least one second network layer protocol process.

As to claim 17, the prior art of record fails to teach, or render obvious, alone, or in combination a method/system of determining a capability of at least one communication facility to pass network layer protocol packets with a particular characteristic between a first network layer protocol process and a second network layer protocol process comprising the steps of: detecting whether at least one first network layer protocol packet has been received, the at least one first network layer protocol packet comprising first information with the particular characteristic, the first information being capable of causing at least one filtering/forwarding entity not to pass the at least one first network layer protocol packet; and determining the capability of the at least one communication facility to pass the network layer protocol packets with the particular characteristic, wherein determining that the at least one communication facility passed network layer protocol packets with the particular characteristic implies that the at least

Art Unit: 2614

one communication facility does not utilize routing at a peer protocol layer to the first network layer process and the second network layer process.

As to claim 27, the prior art of record fails to teach, or render obvious, alone, or in combination a method/system of determining a capability of at least one communication facility to pass network layer protocol packets with a particular characteristic between a first network layer protocol process and a second network layer protocol process comprising the steps of: detecting whether at least one first network layer protocol packet has been received, the at least one first network layer protocol packet comprising first information with the particular characteristic, the first information being capable of causing at least one filtering/forwarding entity not to pass the at least one first network layer protocol packet; and determining the capability of the at least one communication facility to pass the network layer protocol packets with the particular characteristic, wherein determining that the at least one communication facility does not pass network layer protocol packets with the particular characteristic implies that the network facility utilizes routing at a peer protocol layer to the first network layer process and the second network layer process.

Claims 7, 18-26, and 28 are objected because they depend on objected claims 6, 17, and 27, respectively.

### ***Conclusion***

Art Unit: 2614

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Nguyen (US Patent 5,930,264) teaches inter-node signaling for protocol initialization within a communications network.

Kato et al. (US Patent 6,567,298) teaches semiconductor memory device and control method thereof.

Graf et al. (2004/0101125) teaches capability negotiation in a telecommunications network.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Quynh H. Nguyen whose telephone number is 571-272-7489. The examiner can normally be reached on Monday - Thursday from 6:30 A.M. to 5:00 P.M.

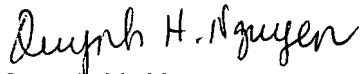
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ahmad Matar, can be reached on 571-272-7488. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

Art Unit: 2614

you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

qhn

A handwritten signature in cursive script that reads "Quynh H. Nguyen".

Quynh H. Nguyen

June 11, 2007